

Title (en)
Honeycomb structure and method of manufacturing the same

Title (de)
Wabenstruktur und Herstellungsverfahren dafür

Title (fr)
Structure en nid d'abeille et procédé de sa fabrication

Publication
EP 1580181 A3 20060920 (EN)

Application
EP 05251752 A 20050322

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JP 2004086086 A 20040324

Abstract (en)
[origin: EP1580181A2] A honeycomb structure 20 includes a cell structure 10 having a plurality of cells 9 communicating between two open ends being partitioned and defined by porous partition walls 7, an outer wall 30 disposed at the periphery of the cell structure 10, and first plugging portions 25 disposed in a checkered flag pattern at one end and the other end of the cell structure 10 by plugging alternately either of the two open ends of the cells, a fluid to be flown from one of the open ends of each of the cells 9 being capable of penetrating the porous partition walls 7 and flowing out from the other open end 5 of each of the cells 9 as a filtered fluid. The honeycomb structure 20 includes the first plugging portions 25 having been fired after plugging, and second plugging portions 26 having been unfired even after plugging.

IPC 8 full level
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Citation (search report)
• [XPXY] EP 1484100 A1 20041208 - NGK INSULATORS LTD [JP]
• [PX] US 2004088959 A1 20040513 - SAITO MAKOTO [JP], et al
• [X] EP 1293241 A2 20030319 - HITACHI METALS LTD [JP], et al
• [PX] FR 2845727 A1 20040416 - DENSO CORP [JP]
• [A] GB 2071640 A 19810923 - NGK INSULATORS LTD & WO 03076047 A1 20030918 - NGK INSULATORS LTD [JP], et al & DE 10347746 A1 20040624 - DENSO CORP [JP]
• [Y] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 09 3 September 2003 (2003-09-03)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 007, no. 131 (C - 169) 8 June 1983 (1983-06-08)

Cited by
EP1967265A4; EP2181755A3; EP2090351A3; EP2527024A4; CN117138476A; EP2910291A3; EP3530339A1; US10918987B2; US11220466B2; WO2007066671A1; WO2015142818A1; WO2012172219A1; US9339754B2; WO2009061397A3; WO2007033908A3; EP2181755A2; US8158202B2; EP2767528B1; EP2058042B2

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